

Michigan Hazard Mitigation Plan: Coordination with Local Hazard Mitigation Planning

State Support for Local Hazard Mitigation Plan Development

Provision of Technical / Direct Assistance

The MSP/EMHSD supports the development of local hazard mitigation plans through the provision of technical assistance (including on a request basis) and through the funding of local mitigation plan development under the Hazard Mitigation Assistance program, which includes the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and Flood Mitigation Assistance Program. The latter two components provide annual funding for plan development (although FMAP applies only to the flood portion of a plan), while the Hazard Mitigation Grant Program makes funds available after a federally-declared disaster. Most HMGP planning funds in Michigan stemmed from Federal Disaster 1346. (See the section below titled “Statewide Hazard Mitigation Planning Project.”)

Historical overview since 2000

Technical assistance has included the provision of state-specific mitigation planning guidance (MSP/EMHSD Publication 207, “Local Hazard Mitigation Planning Workbook”), presentations, assistance with local meetings and group-input activities, assistance with locating data and planning resources, as well as direct “hands-on” assistance with the various steps of the planning process—up to and including the drafting, editing, and proofreading of final plans for adoption and approval. MSP/EMHSD first employed a dedicated local hazard mitigation planning specialist in the beginning of the year 2000, and shortly afterward, the Disaster Mitigation Act of 2000 began to mandate the development of local hazard mitigation plans as a pre-condition for the receipt of federal hazard mitigation grant funds (the requirement was not in effect until several years later). A second planner was often employed (subject to budgeting, hiring, and staffing constraints) as a hazard mitigation specialist during much of the following decade. Between 2000 and 2004, it was calculated that more than 200 meetings had taken place involving the MSP/EMHSD planning specialist(s), to provide direct assistance to communities and planners, and over 30 additional meetings also provided indirect support for these activities. State and federal guidance materials were produced and distributed, and over a dozen presentation and training sessions took place to teach hazard mitigation planning techniques.

That start-up phase of statewide hazard mitigation plan development led into the initial editing of the FEMA-approved Michigan Hazard Mitigation Plan in March 2005. The FEMA mandate for local hazard mitigation plans, as a condition of project grant eligibility, began to take effect. More than 45 Michigan meetings or sessions took place, involving the direct outreach on the part of MSP/EMHSD staff, during the period in which that initial MHMP was in effect. By 2008, the original MHMP had been successfully updated, federal guidance had stronger requirements for local hazard mitigation plan review, and the Flood Mitigation Assistance Program requirements were revised so that all communities were encouraged to produce all-hazard plans (rather than just flood-oriented plans).

By 2010, even before the initial set of local plans had been completed, the first of the required local plan updates began to come due under the five-year cycle mandated by the Disaster Mitigation Act of 2000. Far less state staff time could be devoted to local assistance, because of increased state planning activities, including Michigan’s successful compliance with Emergency Management Accreditation Program requirements. Unfortunately, the same level of funding was simply not available at that time as there had been for the initial period of plan creation. Homeland security funds starting shrinking each year. In addition, as a result of economic problems and property value collapses, many community budgets found it much more difficult to arrange for the required local match portions of grants. This difficulty not only affected the ability to successfully apply for local plan development funds, but also the ability to support hazard mitigation project funds—one of the motivating “carrots” that was available to reward the successful completion of a local hazard mitigation plan. A couple of communities have succeeded in updating their plans on schedule, without the use of any additional planning grant funds, but with some help from MSP/EMHSD staff. MSP/EMHSD staff only has the ability to assist a limited number of communities at a time, and in the light of increased federal plan review requirements that have also been observed since 2008, Michigan seemed to be entering a phase in which a great number of its approved local hazard mitigation plans would expire due to insufficient funding, a dearth of local match resources, and limited staff resources available at MSP/EMHSD.

Nevertheless, a certain level of local assistance and outreach activities have been able to be maintained by MSP/EMHSD staff, on behalf of training and hazard mitigation planning activities. The following is a chronological list, since the previous edition of the MHMP was approved in March of 2011, of the meetings, presentations, and other outreach that MSP/EMHSD planning staff has provided in order to encourage and support the development of hazard mitigation plans throughout the State and to coordinate such plans with a broader comprehensive planning process. It does not include ordinary phone calls, faxes, and emails that have been used to promote and process local hazard mitigation planning activities during that time, even though some of these involved extensive data compilation, planning instruction, and document editing. (Nor does it include the numerous activities involving the MCCERCC, or on behalf of state-level planning, which are both described elsewhere in this plan.) The list instead only documents the actual face-to-face (or coordinated conference) arrangements that have been made by MSP/EMHSD staff on behalf of local emergency management programs and in the service of promoting hazard mitigation planning more widely throughout the state.

MSP/EMHSD staff outreach to promote hazard mitigation planning among local emergency management programs, local officials, other professionals, and the general public, from March 2011 to March 2014:

- April, 2011: Coordination and direct planning assistance with Kent-Ottawa regional plan
- April through September, 2011: Revision of Cass County plan (part of direct assistance)
- April 4, 2011: Conference call with Region 2 Planning Commission re: Jackson, Hillsdale, Lenawee plans
- April 21, 2011: RiskMap conference call
- May 20, 2011: Scheduling of “Discovery” meeting for RiskMap process
- June 2, 2011: Discovery conference call & kickoff of Clinton River watershed analysis process
- June 21, 2011: Collect plan info & send to RiskMap staff
- June 21, 2011: Collect plan info for Wayne County & send to RiskMap staff
- June 23, 2011: Coordinate with MSP district coordinators re: local outreach & direct planning assistance
- June 24, 2011: Discovery conference call to lend state support to the process
- July 7, 2011: Presentation on local planning & updates in District 7 coordinators meeting (in Gaylord)
- July 8, 2011: Presentation on local planning & updates in District 3 coordinators meeting (in Sandusky)
- July 13, 2011: RiskMap conference call & meeting
- July 21, 2011: Presentation on local planning & updates in District 1 coordinators meeting (in Mason)
- August 11, 2011: Presentation on local planning & updates in District 8 coordinators meeting (in Marquette)
- August 22, 2011: Presentation on local planning & updates in District 6 coordinators meeting (in West Olive)
- August 23, 2011: Presentation on local planning & updates in District 5 coordinators meeting (in Kalamazoo)
- September 13, 2011: Online survey for Oakland County plan (as stakeholder) and contact with their planning consultant
- September 15, 2011: Berrien County planning meeting in Benton Harbor (providing direct assistance)
- September 20, 2011: Oakland County planning meeting in Waterford Township (as stakeholder)
- September 27, 2011: Presentation on local planning & updates in District 2 coordinators meeting (in Oak Park)
- September 30, 2011: Conference call with planning consultant for Oakland (and Wayne) County plan updates
- October 12, 2011: Work with Region 7 planning office (Saginaw) on their scope of work description, on behalf of 5 multijurisdictional county plans (and provide feedback on October 28)
- October, 2011: New plan review guidance is released by FEMA
- October 26, 2011: FEMA webinar on new plan review guidance
- November 2, 2011: Participate in Region 14 planning office kickoff meeting for 5 county plan updates
- November 21, 2011: Complete online survey for Oakland County plan update (as a stakeholder)
- November 29, 2011: Participate in Oakland County planning meeting (as stakeholder)
- December 2, 2011: Conference call with University of Michigan-Flint planning consultants
- December 9, 2011: Kent-Ottawa plan submitted to FEMA (1st under new planning standards)
- December 20, 2011: Participate in Oakland County planning meeting (as stakeholder)
- December, 2011: Begin to provide direct assistance to the city of Ann Arbor for its local plan
- January 2, 2011: Draft of Ann Arbor plan posted on its website

- February 17, 2012: Meeting with consultants for the University of Michigan-Flint plan
- March 6, 2012: Conference call with Kalamazoo County (start of direct planning assistance to them)
- March 30, 2012: Kent-Ottawa plan meets FEMA review requirements (plan developed predominantly through direct assistance as the first under the new plan review guidance)
- April 17, 2012: Presentation given at Detroit planning meeting
- April 23, 2012: FEMA review finds that Lenawee County plan met requirements (direct assistance had been provided in the plan's completion)
- April 30, 2012: Investigation of Norton Mounds site preservation efforts on behalf of Kent County (to May)
- May 31, 2012: Presentation at Region 6 planning office's kickoff meeting on behalf of 3 county plan updates
- June 12, 2012: Presentation at District 2 coordinators meeting in Oak Park
- June 18, 2012: RiskMap conference call (FEMA, MDEQ, local meeting arrangements)
- June 20, 2012: Presentation on plan updates at Urban Area Security Initiative meeting in Macomb County
- June 26, 2012: Presentation at District 5 coordinators meeting in Kalamazoo
- July 11, 2012: Attendance at RiskMap workshop for Great Lakes analysis
- July 13, 2012: Presentation at District 3 coordinators meeting
- July 16, 2012: Meeting with Ann Arbor to support direct planning assistance
- July 18, 2012: Presentation at District 6 coordinators meeting
- July 30, 2012: Presentation at District 8 coordinators meeting
- August 2, 2012: Presentation at District 7 coordinators meeting
- October 4, 2012: Meeting with University of Michigan-Flint planning consultants
- October 10, 2012: Revise local "condensed" plan review sheets (for consistency with federal changes, while preserving some extra details about the requirements that were not included in the revised federal form)
- October 11, 2012: Conference call with Kalamazoo County re: direct planning assistance, and lay out the framework for direct planning assistance to update their county plan (in support of a FEMA-approved hazard mitigation project)
- October 22, 2012: Conference call with Kalamazoo County re: direct planning assistance
- November 7, 2012: Leading role in a Kalamazoo County plan update meeting
- November through December, 2012: Direct contact and outreach with local communities within Kalamazoo County, to assemble and discuss local planning sections for those communities within the multijurisdictional county plan
- December 5, 2012: Leading role in a Kalamazoo County plan update meeting
- January, 2013: Develop a framework for direct planning assistance to Ionia County, Mecosta County, Montcalm County, and Osceola County
- January 18, 2013: Register as Wayne County local plan stakeholder and answer survey questions for the plan
- January 23 and 29, 2013: Develop and revise new local coordination plan section in the MHMP to explain new prioritization criteria for direct planning assistance to local EM programs
- January 30, 2013: Participate in Wayne County local planning meeting in Romulus
- January through June, 2013: Begin work on updating EMHSD Pub. 207 "Local Hazard Mitigation Planning Workbook" – but this work is placed on hold due to other priorities and the release of new FEMA guidance on the subject (in March) that serves the same purpose; expected to resume in 2014-2015
- February 1, 2013: RiskMap meeting information sent to relevant local communities
- February 27, 2013: Participate in RiskMap conference call re: Osceola, Isabella, and Muskegon Counties
- March 4, 2013: New FEMA guidance received on local plan review standards
- March 15, 2013: Second survey for Wayne County local plan update (as stakeholder)
- March 27, 2013: Presentations given at "Resilience meetings" for RiskMap: Mt. Pleasant (Isabella County) and Muskegon (Muskegon County)
- April 4, 2013: Meeting with Region 7 (Saginaw) planning staff – instructional on behalf of 5 counties
- April 10, 2013: Conference call on RiskMap (with FEMA, MDEQ)
- May 6, 2013: Presentations at planning meetings in Roscommon and Gladwin Counties (in support of Region 7 local activities)
- May 9, 2013: Presentations at planning meeting in Iosco County (in support of Region 7 local activities)

- May 9, 2013: Presentations at planning meetings in Isabella and Clare Counties (in support of Region 7 local activities)
- May 17, 2013: Meeting with Region 7 (Saginaw) planning staff – instructional on behalf of 5 counties
- June 10, 2013: Meeting at Region 12 planning office (Escanaba) to support their development of 5 county plan updates
- June 11, 2013: Meeting at Region 13 planning office (Houghton) to support their development of 6 county plan updates
- June 12, 2013: Meeting at Region 11 planning office (Sault Ste. Marie) to support their development of 3 county plan updates
- July 2, 2013: RiskMap conference call re: Arenac and Monroe Counties (RiskMap involves STARR, which is an alliance of several consultants on behalf of FEMA)
- July 10, 2013: Arenac RiskMap meeting attended by MDEQ staff
- July 11, 2013: Monroe County RiskMap meeting includes discussion of direct planning assistance to the county, starting in 2014
- July 12, 2013: Meeting in Centreville (St. Joseph County) and presentation regarding hazard mitigation planning and direct planning assistance to them, starting in 2014
- July 17, 2013: Direct planning assistance to St. Joseph County in adapting Emergency Action Guideline (EAG) content into their hazard mitigation draft plan
- August 1, 2013: RiskMap “webex” conference call with online presentation: resilience “lessons learned”
- August 15, 2013: Meeting with Region 7 (Saginaw) planners – instruction to support 5 county plans
- September 16, 2013: Planning meeting in Livingston County (Howell) to support their upcoming plan update
- September 26, 2013: FEMA webinar on hazard mitigation planning (supported and announced to local EMCs statewide by the MSP/EMHSD)
- October 10, 2013: FEMA conference call re: selecting RiskMap communities
- December 6, 2013: Participation in Allegan County planning meeting (Salem Township)
- January 8, 2014: Respond to Allegan County online survey for local plan update (as stakeholder)

These forms of assistance are expected to continue throughout the three-year period (2014-2017) covered by this plan. However, field visits have tended to be much less frequent since the initial MHMP was completed in early 2005. This is because of state budget cutbacks, transportation cost increases, economic declines within the State, limited staffing, and the periodic need to prioritize State-level planning and response activities. Much recent direct assistance has shifted toward phone and email communications, although some of that assistance has been extensive. However, training activities still occur through the delivery of MSP/EMHSD training courses (the MSP/EMHSD’s lead local mitigation planner regularly gives presentations on mitigation planning and hazard analysis), the provision of guidance materials (including internet-downloadable copies), and feedback provided from the ongoing local plan review activities.

Since early 2011, the following local plans (or plan updates) have been completed, quite a few of which have involved the direct assistance by EMHSD staff: Bay County, Cass County (direct assistance), Jackson County (direct assistance), Oakland County (stakeholder participant), Bloomfield Township, City of Ann Arbor (direct assistance), Lenawee County (direct assistance), Hillsdale County (direct assistance), Berrien County (direct assistance), Kent-Ottawa regional plan (direct assistance), Kalamazoo County (direct assistance), University of Michigan-Flint, Pokagon Band of Potawatomi, Eastern Michigan University, Wayne County (not including the City of Detroit), City of Lansing, Baraga County, Ontonagon County, Gogebic County, Iron County, Houghton County, Keweenaw County, Alpena County, Alcona County, Oscoda County, Otsego County, Midland County. In addition, work has begun on numerous other plans, for as EMHSD staff had to shift its planning resources back into the required state plan update, new THIRA/SPR requirements, and disaster response and recovery (Luce and Schoolcraft County wildfire, flood disaster 4121), a large number of planning grants were also put in place to allow dozens of counties to have their plans updated. As already noted, direct EMHSD planning assistance is scheduled to resume for counties that have not yet had any FEMA-approved plan completed in the past: Ionia County, Mecosta County, Monroe County, Montcalm County, Osceola County, and St. Joseph County (with Branch County also to be assisted as time and resources permit).

Cooperating Technical Partners Program (NFIP Floodplain Mapping and Map Modernization Program)

The Michigan Department of Environmental Quality, Land and Water Management Division (MDEQ/LWMD) also provides some technical assistance to local communities in developing floodplain maps through its “Cooperating Technical Partner” (CTP) Program. Under the CTP Program, states and local communities with demonstrated resources and expertise are delegated the authority to review and publish National Flood Insurance Program (NFIP) studies without the need for further federal review. The state and local communities, as CTPs, may also process revisions to existing NFIP studies and then re-map the floodplain. Local community resources may include, but are not limited to, gathering of field data, labor, funding, in-house information, and providing technical expertise to print the floodplain maps. The MDEQ/LWMD devotes staff time and technical expertise to develop hydraulic models and produce the NFIP reports and associated digital floodplain maps which are then made available on the MDEQ/LWMD and FEMA web sites. This information can help to inform communities as they proceed with floodplain management and hazard mitigation planning efforts. Please refer to the Riverine Flooding Section in the Hazard Analysis section of this plan, for more information about the current Map Modernization phase of these activities.

Tribal Hazard Mitigation Planning within Michigan

Federally-recognized Native American organizations have the option to either apply directly to FEMA for hazard mitigation planning funds and technical assistance, or to coordinate with the State of Michigan to apply for State-administered funds. In the former case, the Native American area would be treated as if it were a State, dealing directly with FEMA. In the latter case, the Native American area would follow the same procedure that Michigan’s local governments do to obtain funds and produce plans. Since most of Michigan’s townships, cities, and villages do not have their own separate emergency management programs, but instead have granted that function to a county-level emergency management office, most of these local units of government are covered under County-wide hazard mitigation plans (which are treated as multi-jurisdictional plans and reviewed differently to be certain that they adequately cover all participating communities). Some of Michigan’s recognized Native American areas and organizations have participated in the hazard mitigation planning process of the county or counties in which they are located, and have then adopted that multi-jurisdictional plan so as to gain FEMA approval and grant-eligibility for hazard mitigation projects. One of the most interesting examples of this involved the Grand Traverse Band of Ottawa and Chippewa Indians, which participated in and adopted hazard mitigation plans for five counties in which their members reside, with the coordination of the Northwest Michigan Council of Governments. A few tribal organizations have developed their own separate hazard mitigation plans. More information follows.

MSP/EMHSD offers and provides technical assistance to recognized tribal organizations just as it does to any of the counties or cities with their own emergency management programs. MSP/EMHSD has coordinated with the FEMA Region V Tribal Liaison as needed, to assist Native American areas and organizations.

Disaster-Resistant Universities

MSP/EMHSD has also supported the development of plans for colleges and universities (and their participation in local or multi-jurisdictional plans for the communities in which they are located). Many educational institutions have special planning needs and an unusual geographic layout within or across multiple communities and districts, and find benefit in developing their own distinct plans for hazard mitigation and emergency management. MSP/EMHSD has referred various communities, agencies, and institutions to the resources provided by FEMA for its Disaster Resistant Universities initiative. A few universities now have approved hazard mitigation plans, distinct from those of the communities in which they are located. More information follows.

Statewide Hazard Mitigation Planning Project

Recognizing the need to support the process of developing local hazard mitigation plans, FEMA authorized states to use up to 7% of allocated HMGP funds for the development of state, local or tribal hazard mitigation plans. The MSP/EMHSD and MHMCC (now MCCERCC) took full advantage of that planning provision in December 2001 and allocated 7% of available HMGP funds under Federal Disaster 1346 (\$2.3 million of the \$33.2 million allocation total) to support the development of hazard mitigation plans in emergency management program jurisdictions in Michigan (all 83 counties plus selected municipalities over 10,000 in population). With the 25% local match factored in, the total funding available for mitigation plan development exceeded \$3 million. Annual Pre-Disaster Mitigation Program funds (administered by the MSP/EMHSD) allowed the development of additional plans, primarily in the more densely-populated areas of southern Lower Michigan, starting in 2002. A number of additional plans had been subsidized through the Flood Mitigation Assistance Program for about 12 years starting in 1996, although many of those plans

covered only a single municipality rather than an entire county, as became standard with the other planning grants, and by 2008, the FMAP planning grants were allowed to be used only for the flood-portions of an all-hazard mitigation plan (the plan review standards for different programs were consolidated into a single set of all-hazard planning criteria and made a bit more strict than the standards used previously). Unfortunately, one community (Bloomfield Township) was “caught” by this policy change, and required direct MSP/EMHSD assistance in converting the scope of its plan from its original flood-focused study into a full multi-hazard mitigation plan.

This statewide planning initiative is still being implemented, since several communities ran into staffing and logistical problems that delayed their progress. Although the vast majority of Michigan counties were able to develop an approved local hazard mitigation plan using these funding sources, as of early 2014, there are still 7 counties that had not been able to do so completely. MSP/EMHSD has started to provide direct assistance to these counties, so that all parts of Michigan would finally have been covered by approved plans (even if some of these areas did not keep up with their plan updates within the FEMA-required 5-year time frame).

The map on the following page shows the state of this statewide planning goal as of late 2010. It does not show which plans have since expired. (A later map will illustrate the more recent status of these communities). Its main point is to illustrate how much of the state has successfully developed local hazard mitigation plans at some point during the past 12 years. Of the counties that have been marked as having plans “not yet FEMA-approved,” several have since met this objective—the counties of Cass, Gratiot, Hillsdale, Jackson, and Lenawee are now covered by local hazard mitigation plans. (Other plans, however, have since expired—see the subsequent map for Dec. 2013.)

PlanStatus

- ☐ Some draft materials were produced
- ☐ A plan was produced but is not yet FEMA-approved
- ☐ Has a plan that was FEMA-approved (but needs periodic updating)

Produced by:
Michigan State Police
Emergency Management and Homeland Security Division
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Plan Development Process / Status

As shown in the preceding map, as of December 21, 2010, a dozen counties had not yet developed an approved plan. Three years later, five of these counties had achieved this goal. Of the seven counties that remain, three had not used federal funding under HMGP or PDMP (although Branch County had successfully applied, they later chose not to use the funds) MSP/EMHSD staff has started (or plans to provide) direct assistance to these seven counties, to allow approvable plans to be developed during the next couple of years. In the starting phase of this activity, draft hazard analyses have been under development for the four northernmost of the uncompleted counties (Osceola, Mecosta, Montcalm, and Ionia), and meetings have already taken place to arrange for similar assistance to Monroe and St. Joseph Counties. Similar assistance will be offered to Branch County, when staff time permits.

A variety of methods were used for the initial development of local hazard mitigation plans, depending on the local desires, capabilities and circumstances of each participating community. Many counties made use of the professional planning expertise and services of Michigan's Regional Planning Offices to assist with local plan development (although the resources available to these offices do vary, and not all of them work on this type of plan). In addition, many county and local planning offices were also heavily involved, as were local emergency managers and some colleges and universities. Michigan State University, Western Michigan University, and Central Michigan University have especially been instrumental in aiding the development of several county plans. Numerous local and state agencies, and local business and industry were also involved, where appropriate. The MSP/EMHSD has continued to provide direct planning assistance to those communities that require it, subject to staff and budget limitations. Each local mitigation plan has been (is being) developed using whatever methods were most appropriate for each community and have usually resulted in the development of plans within the required timeframes of the HMGP and PDMP grants. As listed previously, there have been numerous occasions when direct assistance has been provided by MSP/EMHSD staff in the development of local hazard mitigation plans. In addition to these external meetings, MSP/EMHSD staff was available on a daily basis through phone and electronic communications, and numerous questions, advice, draft reviews, etc. were handled through those means.

FEMA requires all states to submit plans to their Regional FEMA Office for official review. For Michigan, this refers to the FEMA Region V office in Chicago. Plans are reviewed by MSP/EMHSD planning staff using their own review form, which is consistent with FEMA's revised plan review tool (a previous edition had been called a "crosswalk") but contains more explanatory detail. MSP/EMHSD's role is designated primarily as an advisory one in this regard, as a means of supporting/completing local planning activities and assisting with federal review, for only the FEMA review of a plan is considered official (for FEMA purposes, making communities eligible to receive or directly benefit from hazard mitigation project funds). Plans received by the MSP/EMHSD were reviewed (unless special circumstances required submission to FEMA instead) and when review criteria were met, the plans were forwarded to FEMA with the recommendation that they be approved. Such submissions were accompanied by documentation that the plan, in the judgment of the reviewer, met the local planning requirements of the Disaster Mitigation Act of 2000. If one or more review items were deemed inadequate, a (state-reformatted) "condensed plan review form" was returned to the community to convey the elements in which the plan's quality or content needed enhancement. Comments or suggestions were included in reviews, describing corrections, additions or deletions that the reviewer believed to be necessary for official approval, plus any other recommendations the reviewer believed would help to improve the quality of the plan without undue burden to those involved in the process. The MSP/EMHSD staff thus worked with communities and coordinated with FEMA as needed until the plans met all the required elements and were officially approved by a federal review.

The 2010 map of previous planning accomplishments only provides a fraction of the information relevant to the local planning process, however, because communities are on a 5-year plan development cycle, and need to update their plans regularly after their initial plans had been completed. With respect to this process, a different map is presented on the next page, which shows that there have actually been a fair number of communities whose completed plans have expired. As will be described shortly, however, many of those (but not all) are currently making use of funds to update their plans and thus regain their eligibility to benefit from project grant funds. The approved plan analyzes local hazards, risks, and vulnerabilities, and lays out potential actions to mitigate these; then the community should apply for specific projects that support or accomplish the proposed actions in its plan. The need to keep local plans up-to-date is an extensive, ongoing activity at both the local and state level.

Indian Status

- No reviewable draft plan received: Battle Creek
- Old plan has expired (an update process is needed): Lac Vieux Desert Tribe, Grand Traverse Band
- Planning process currently under way: Delta Twp, Detroit
- Plan not yet approved by FEMA

Plan Status

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The map on the previous page shows that a great amount of work needs to be done on an ongoing basis in order to keep local hazard mitigation plans updated on the required 5-year schedule. A lessened amount of available federal funds over the past few years (i.e. HMGP) has required alternative means of plan update to be considered and utilized—especially for those communities for whom the use of grant money has not seemed feasible or politically desirable, and who have thus not yet completed an initial plan. The most promising technique to accomplish local plan updates through direct EMHSD assistance involves the following process:

1. Since the core of a good hazard mitigation plan is its hazard analysis section, available staff can consider all convenient sources of hazard information, while taking into account the strengths and weaknesses of alternative sources.
2. The most readily available information sources will be used to provide locally-specific information that can be incorporated into community hazard mitigation plans. The focus will be upon procedures that do not require special expertise (i.e. funded assistance) to complete.
3. MSP/EMHSD staff determines the amount of direct assistance that it can provide to local planning efforts.
4. MSP/EMHSD staff determines which communities are in greater need of assistance, and how to prioritize their assistance to multiple communities that may have simultaneous competing need for it.
5. MSP/EMHSD staff will then meet with local emergency managers as needed (e.g. by attending the MSP district coordinator meetings that occur regularly in multiple locations, or through the scheduling of more customized meetings), and will present the ideas for plan update and direct assistance procedures to the local emergency managers and MSP district coordinators.
6. Direct assistance with plan updates will then proceed, according to the priorities developed and discussed, to most efficiently serve the communities that were considered to have the most pressing needs for planning assistance.

Current priorities for direct planning assistance are tentatively proposed as follows. These ideas can be expected to be re-shaped and refined as discussions with local and district staff proceed throughout 2014.

1. Communities that have specific projects they have arranged to fund through the federal Hazard Mitigation Assistance program will be prioritized over those that do not have specific project ideas. (Rationale: HMA assistance requires a completed or updated local hazard mitigation plan to be in place and approved by FEMA. Communities with fewer immediate needs for federal mitigation funding would be expected not to suffer so much from any lapse that may occur in keeping their local plan up to date.)
2. Communities with an active local emergency manager, who has a means by which the required local input/review process can take place for a plan, will be prioritized over those who do not. (Rationale: MSP/EMHSD planning staff can provide only so much direct planning assistance, but not the full local coordination that is required to bring a local plan to completion and get it adopted by local authorities. Therefore, and it makes sense to favor the provision of assistance to communities who can supplement it with their own efforts, without which a plan cannot be successfully completed. MSP/EMHSD work alone cannot cause a local plan to be successfully completed or updated. The update process goes beyond the mere revision of a planning document—it also requires a local review and input process, to guide and use information from an updated local hazard analysis and put it to work in updating a set of local hazard mitigation strategies to be implemented as a result of the plan.)
3. Communities that have more pressing needs, based either their history of emergency and disaster events, or based on the extent of vulnerabilities revealed by their local hazard analyses, shall be prioritized. (Rationale: Areas that are more vulnerable to damage or loss of life have more potential gains to be realized from efforts invested into hazard mitigation activities.)
4. Communities that have fewer alternative means of completing their hazard mitigation plans shall be prioritized for direct planning assistance by MSP/EMHSD planning staff. (Rationale: Limited MSP/EMHSD staff time is best used to serve those programs that have more limited capacities of their own. For example, local programs that have new emergency managers, EM programs that are part-time only, EM programs that are swamped with competing needs, those that are located in a region that is not as well-served by county/regional/university planning resources, or programs whose attempts to procure planning grants did not succeed, could all be perceived as having a greater need for direct assistance.)

Coordination with Local Mitigation Planning

To the extent practicable at this time, this plan has been developed in coordination with local hazard mitigation planning efforts. For example, the Hazard Analysis section of this plan was informed by locally-derived risk/vulnerability assessment information, while it in turn provides a great deal of information that can be used by local communities in their own planning. In addition, many of the MHMP objectives (discussed in the previous sections) were developed and selected after a consideration of not only the state's resources, authorities, and programs, but also (1) the identified local vulnerabilities to natural, technological or human-related hazards, (2) local project applications that have been received and processed by MSP/EMHSD (successful applications are described in Attachment C), and (3) hazard mitigation proposals that have been included in local plans reviewed by MSP/EMHSD staff.

Integration of Local Plan Data

Since this document is a state-level plan, it focuses primarily on issues and concerns of a statewide or regional nature and most of its plan elements are necessarily broad in nature, scope and application. The State of Michigan acknowledges the "home rule" principle that hazard vulnerabilities involving local communities, local hazard areas, and local facilities primarily need to be addressed in local hazard mitigation plans—since it is the local level at which zoning and building permits and land use planning takes place, and the local level at which local information and resources regarding drains and roads and municipal elected officials takes place. As a state plan, the MHMP necessarily takes a more "global" approach than any of the local plans, by addressing hazards and vulnerabilities across the state, which usually involves a level of agency that focuses upon coordination, guidance, leadership, encouragement, funding, regulations, legislation, and state agency resources—although at the same time including a consideration of local needs, priorities, information, and coordination. For 2014, the MHMP objectives described in this plan now include expanded consideration of specific types of hazards prioritized in part by local vulnerabilities (beyond the flood emphasis that has often characterized this type of planning). It has also been described how staff from MSP/EMHSD has provided ongoing assistance to local emergency management programs in the development of their local plans, and it is hereby noted that the same personnel who have coordinated with the local communities have also been the MSP/EMHSD personnel most heavily involved in the update of this State plan.

The process of updating the MHMP included the consideration of all approved local mitigation plans and planning draft materials on file with the MSP/EMHSD State Support Unit. In the few cases where the amount of such materials on file had been considered insufficient, direct contact had been made to survey that county and determine which hazards it prioritizes as posing the most local risk. Consideration was especially given to the following types of information, for local jurisdictions:

- Information on vulnerable residential and commercial structures in the floodplains and other hazard areas, where this was substantial enough to suggest a need for state assistance or awareness.
- Historical events and their associated loss estimates.
- Land use trends and associated areas of concern where development may overlap with identified floodplains and other hazard areas.
- Specific mitigation projects coinciding directly with state goals and objectives, or that exhibit concerns serious enough to warrant consideration at the state or federal level.

Consideration has also been given in avoiding the description of local information that may be considered sensitive or confidential, especially in light of homeland security efforts to prevent terrorism and similar criminal activities. MSP/EMHSD staff will continue to collaborate with local planners and emergency managers to ensure that accurate and best-practice data and maps are included in updated local and state plans in the future, and that outdated or unduly sensitive information does not enter into the plan. MSP/EMHSD staff may, in the future, develop additional planning guidance or policy memoranda on this data incorporation process. In addition to the direct contacts between local communities and state-level agencies that address various types of hazards (i.e. MSP/EMHSD, MDEQ, MDNR, MDOT, etc.), the MCCERCC has been involved through regular meetings and monitoring of the state planning and update process, and thereby connects state mitigation activities with many other agencies. This updated 2014 MHMP has been discussed with and reviewed by MCCERCC members, and its finalized version (the FEMA review copy) went before the MCCERCC's hazard mitigation committee in February 2014 and the full MCCERCC to give its approval in March 2014. Thus, although the MCCERCC (which includes representatives of the local emergency

management programs and the public at-large) had already been involved in the drafting process and its member agencies have provided extensive feedback on the updated plan (and its constituent hazard analysis, updated and published in July 2012 before being further updated for the full 2014 plan). Although the MCCERCC acts as an advisory body, its review and approval of this updated plan (at the same time that FEMA's review takes place) enables a confident set of recommendations or endorsements of the quality of this update to be made to the Governor, to allow timely review and approval from that office. (Both review processes lead into the official adoption of the finalized plan, the last requirement for full FEMA approval of the update.)

Local Programs, Policies, and Capabilities

Local emergency management programs vary widely in their resources, expertise, and capabilities, but also in their risks and needs. State agencies have therefore provided various forms of assistance and guidance to these local programs throughout the years. Land use policies are distinctly local in their nature, and tend to be some of the most important when it comes to hazard mitigation activities. Local governments and programs vary widely in this aspect, as well. Some have dedicated planning departments, while many others hire external assistance to meet planning requirements on an as-needed basis. As described in the State profile section of this document, a local community may have a very small population, or a very large one, and in both cases, there can be a wide variation in the quality of services it has available, either on a per-person or a per land area basis. The amount of resources available to county agencies (such as road commissions and drain commissions) also varies throughout the state. Non-profit regional planning agencies exist in Michigan, and have the entire state divided into 14 regions for which these office collect and provide information, but again, while some offices have excellent staff and resources available to assist with hazard mitigation planning, others do not have any additional resources ready to provide. Although a great many resources exist within the general Metropolitan Detroit area, the complexity of that area goes beyond any one agency—the municipalities and counties that compose the area do not have the authority to speak (or resources to act) on behalf of the entire metropolitan area, and the Southeast Michigan Council of Governments (SEMCOG) planning office tends to act within limited spheres of coordination and technical assistance. Although certain kinds of funds are technically available for use in hazard mitigation activities, they require a substantial amount of work to obtain and make use of, making their use impractical for certain jurisdictions whose staff and budgets have already been shrinking. Preparedness and response capabilities often receive the most attention—especially since these phases of emergency management have a clearer relevance to most types of hazards, while hazard mitigation has mainly been defined in terms of flood hazards and, to a lesser extent, wildfires and severe winds.

It is useful to admit that, from the resource-strapped perspective of local jurisdictions, the preparedness and response phases of emergency management are rational ones to favor, for most types of threats and hazards. For more than 10 years, state guidance has sought to advise and identify appropriate hazard mitigation actions for all types of hazards, but the most relevant often involve activities that may technically be deemed preparedness activities (or prevention or protection or other recently proposed “phases”). All important hazards can be prepared for, but when it comes to their prevention or mitigation, actual authorities and capacities often involve the private decisions of individuals and firms, and the efforts of government (at any and all levels) to try to regulate or place requirements upon these individuals and firms, without exceeding their political authority to do so. A compelling need is required in order to make strong regulations politically feasible and justifiable, yet when it comes to Michigan's array of hazards and threats, it often requires informed study to produce a reasonable understanding of their risks, with which it becomes possible to justify various costs. And yet, a large number of citizens do place great value upon individual responsibility (for which public awareness and educational actions are deemed most appropriate for government to take, as a kind of advisory role rather than a compulsory one), while resisting the capacity of government to strongly regulate what people are allowed to do with their own property. The value of higher levels of government for assisting local communities in dealing with a disaster is widely recognized, but the right of government to impose preventive regulations and policies, even if well-intentioned and demonstrably effective, often is not—particularly when accompanied by many sets of bureaucratic procedures and conditions. In cases involving clearly defined natural risks in specific areas, such as floodplains, efforts and costs are easier to justify (even though many persons have difficulty understanding the probabilistic aspects of flood risks). However, a great amount of planning activity has been occurring (at all levels) for years, in order to examine other types of hazards which are less clearly defined in Michigan. (Natural hazards such as tsunamis, hurricanes, and earthquakes, which are huge priorities in other states, are not particularly relevant for Michigan's communities.) Many hazards are associated with offsetting benefits. For example, floodplain locations are often very scenic and desirable places to be, except when a flood actually occurs. Woodlands are also scenic and

desirable, except when devastated by wildfires. Many other hazards threaten all locations in Michigan, even if some are far more threatened than others. But the levels of expectation, preparedness, and resilience also vary from community to community. Snowstorms, for example, have greater magnitude in the northern parts of Michigan, but do less damage there than in southern parts of the state, according to official records. This is seemingly due to greater preparedness in the north. Would similar levels of preparedness be considered as cost-effective in the southern parts of the state? Perhaps not. This is a tricky thing to calculate, except at the local level. But hazard mitigation planning is technically not required to (supposed to?) consider the benefits of preparedness activities, even if those are far more cost-effective than any of the available “mitigation” ideas. Therefore, the hazard analysis component of a hazard mitigation plan may be far more useful for emergency management programs in general (which are in charge of preparedness and response activities) than it is for the “mitigation” options that are offered for most of Michigan’s hazards.

Hazard mitigation’s most well-proven Michigan track record seems to be in addressing flood risks, but part of this is surely due to the fairly narrow way that hazard mitigation has been defined—as distinct from “preparedness.” Within this fairly narrow framework, most local programs understandably focus upon what they are actually authorized to seek under available hazard mitigation funding sources. As seen in Attachment C, these tend to involve flood mitigation projects and the installation of warning systems. These are useful activities, and even though warning may be considered to be a preparedness or response activity, it is important that it has been allowed to be recognized as hazard mitigation (in view of its protective effects upon human safety). By comparison, it is harder (but not impossible) to justify the expense of widespread storm shelters, harder to re-engineer houses and buildings to be more wind-resistant, harder to re-design infrastructure to be freeze and earthquake resistant, and technically ineligible to fund most maintenance and repair activities under available federal funds, even when those would be plainly useful for hazard mitigation purposes (as when dredging drainage channels and clearing them of debris).

When tasked with identifying and achieving hazard mitigation actions, then, local programs seem constrained to operate within certain pre-defined boundaries that may not be immediately evident when the language and guidance surrounding hazard mitigation treats it as a conceptually open topic—an all-hazards approach with the implicit assumption that where there is a risk, there must surely be a corresponding risk mitigation strategy. Such strategies simply may not be of a kind for which any follow-up funding is available, however. The goal of integrating hazard mitigation concepts into other types of planning is meant to provide a way around these narrow constraints. What cannot be directly accomplished through available federal funds might be something that other funding sources can accomplish, or that can be addressed by more evenly distributing the costs of a solution among the array of underlying design, planning, political, and regulatory factors, rather than having them all hinge upon a specific, corrective project, after vulnerabilities have already been revealed.

The down-side to the integrated planning approach is that there are a great many communities for whom comprehensive plans are merely an occasional federally mandated requirement, rather than something that is seen as a vital force in shaping their community. This perspective, although it may seem like a very limited one to planners, is not an unreasonable one—especially for small communities whose character barely changes from decade to decade. Urban planning originated in a period of rapid population growth and economic industrialization. Over time, it was more broadly conceived in terms that made regional, state, and national planning seem to be equally viable, but in the United States, there have always been limits upon what community plans are authorized to do, and in a context where a community’s plan accurately reflects local opinions, it may rightly be designed in a way that does not accomplish much except to try to preserve those things that many persons in the community admire and desire—the things that attracted them to (or kept them in) that community or geographic area. The limits to the idea of integrating hazard mitigation into local plans, is that only a minority of local plans are covering communities whose people desire (and are comfortable with) a particularly active or imposing approach to this type of regulation. And even in those communities, things are usually not accomplished without some costs. Where these involve costs that become privatized, individually opted for, or very well-distributed among all taxpayers, then hazard mitigation objectives may indeed be served. But this is achievable only very slowly, probably as a result of the public education and awareness-building activities as much as anything else, and not something that receives immediate recognition and support, especially at greater taxpayer expense. Greater incorporation of hazard mitigation concepts, designs, and activities into insurance policies and rates should probably be encouraged, as a way to more quickly achieve protective results (or an adequate distribution of the costs of safety improvements) than most local plans can probably provide. It is not denied,

however, that there are quite a few communities throughout Michigan that have plans (and financial resources) which could well-serve the goals of hazard mitigation. But when the most concrete risk-reduction activities are those that involve the design of private structures, or an awareness and preparedness-building approach, then a hazard mitigation plan might not do any better than to point in those directions, without the means to connect those actions with designated hazard mitigation funds or to use those parts of its plan to comply with federal review requirements, which ultimately call for the identification of projects that do meet funding eligibility guidelines.

This is the set of dilemmas in which local hazard mitigation plans have now been operating in Michigan, over the past decade or so. At the same time, community comprehensive plans are reluctant to impose private costs upon individuals and firms (or to recommend major capital improvements that might be too burdensome upon local budgets) in order to serve the often-abstract estimates of risks versus benefits, sometimes with very uncertain distinctions between individual level risks and responsibilities and those of community and government agencies, and for this reason, most such plans do not greatly add to the capacity for hazard mitigation in its fullest sense. While anything that promotes public education and awareness on the subject of hazard risks and vulnerabilities is surely helpful, many of the things that could reduce risks from the full array of identified hazards do not fall within readily defined areas for which specific actors can (or are willing to, or are able to) take specific palliative actions. There have also been widespread misunderstandings about how the development of local hazard mitigation plans do or do not tie in with various government mandates. For example, it is often believed or claimed that the lack of a local hazard mitigation plan will make communities and their members ineligible for any disaster assistance from higher levels of government. Although this is simply untrue, it also seems certain that this mistaken belief is one of the things that has allowed many local hazard mitigation plans to be developed and updated during the past 10 years—that with the understanding that the main state/federal reward for completing a local plan is the ability to access grant money to allocated specifically and solely to carefully defined forms of hazard mitigation projects, the incentive of local communities to go through the increasingly rigorous process of developing these plans is likely to decline. In some instances, the effort to navigate these types of misunderstandings, as well as the rather involved regulatory standards for local hazard mitigation plans, has *decreased* the willingness of some planning agencies to get involved in the activities. Hazard mitigation planning, and the potential for project funds that comes from the successful completion of such a plan, must be realistically perceived as being worth the efforts that it requires, in order for local support of the activity to continue. For some communities, operating under limited resources, a benefit-cost calculation may result in a decision not to undertake this type of planning, the local share requirements of the grants may make local projects seem too difficult to fund even when a plan is in place, and the bureaucratic requirements involved in obtaining such grants may be a third obstacle that may feel too difficult to overcome. Local programs are to be greatly applauded for the degree that they have succeeded in developing and maintaining updated local plans over the past 10 years, in spite of these great (and often increasing) challenges. It is usually more clear-cut and compelling to focus on the more immediate and mandated tasks of responding to an event, and increasing one's preparedness to do so. Fortunately, the development of a hazard mitigation plan does in most cases help agencies and communities to understand their hazards and thereby prepare and respond better to their next emergencies. It is not clear in many cases whether the benefits of hazard mitigation projects, specifically, outweigh the preparedness and response benefits that are realized through the plans' analysis of local hazards, and therefore which aspect of a local hazard mitigation plan is considered more beneficial for a community.

Future Planning Efforts

Support of Local Planning Activities

Following the adoption of this updated Michigan Hazard Mitigation Plan, planning efforts at the local level will continue to be actively supported through MSP/EMHSD monitoring, direct and indirect technical/planning assistance, and through administration of relevant grant funds and provision of guidance materials and training. (At the same time, other state agencies' ongoing outreach efforts, related to the various hazards in this plan (e.g. MDNR re: forest fires, MDEQ re: flooding, etc.), will continue. State and local coordination of hazard mitigation planning efforts during future plan updates (at both levels of government) will be enhanced through the:

- Sharing of state, local, and regional information on hazard incidents
- Sharing information sources (e.g. printed guidance, online databases, etc.) between state and local planners

- Provision of training sessions by MSP/EMHSD (and other state agencies) to local emergency managers, planners, etc.
- State, district-level, and local meetings, hearings, training sessions, conferences, etc.
- The Michigan Citizen-Community Emergency Response Coordinating Council
- Ongoing assistance to and feedback from local emergency management programs (direct and indirect)
- Coordination with state agency emergency management coordinators and MSP district coordinators
- Coordination with planning and emergency management agencies (e.g. MEMA)
- Coordination with other agencies who also work with local communities (e.g. Michigan's regional planning offices, MSU extension centers located in each county throughout the state, U.S.G.S. and National Weather Service offices, Silver Jackets, etc.)
- Numerous other contacts and information sources that are present during the various meetings and business conducted by, or attended by, relevant MSP/EMHSD planning staff (e.g. Michigan Climate Coalition)

Although an updated edition of MSP/EMHSD Publication 207 "Local Hazard Mitigation Planning Workbook" had been planned for 2013, it had to be delayed because new FEMA guidance came out during that year, a state disaster declaration occurred, and work had to move ahead on the required 3-year MHMP plan update. The FEMA guidance materials were considered adequate to provide guidance to Michigan communities and planners for the next couple of years, and the completion date of the revised Pub. 207 is now targeted for 2015 (following, and informed by, a series of commitments by MSP/EMHSD staff during 2014-2015 to directly assist at least 6 counties in completing their initial local hazard mitigation plans). If the state plan update schedule can be expanded to a 5-year cycle instead of the current 3-year cycle, it will be very helpful to free up state resources and better allow them to assist local communities with their planning and hazard mitigation activities.

For guidance on various aspects of the local hazard mitigation planning process, local communities and agencies have frequently been referred to (or provided with) copies (printed or digital) of the books in FEMA's "How To Guides" series (<http://www.fema.gov/plan/mitplanning/resources.shtm#1>). For guidance on the requirements of local hazard mitigation plans and their review standards, communities and agencies have regularly been referred to (or provided with) FEMA's "Local Mitigation Plan Review Guide" book and their more recent publication, "Local Mitigation Planning Handbook" (<http://www.fema.gov/media-library/assets/documents/23194?id=4859> and <http://www.fema.gov/media-library/assets/documents/31598?id=7209>). It is considered that these books provide guidance to local planners and emergency managers that is sufficiently comprehensive and timely for their use in developing local hazard mitigation plans, and thus it was acceptable for the state guidance document to be delayed. (The latter FEMA document came out in 2013 and thus contained the most up-to-date and authoritative guidance about plan review standards.)

As stewards of both state and local mitigation planning in Michigan, the MSP/EMHSD and the MCCERCC are in a unique position to foster and arrange for state/local coordination through these techniques, plus new and updated plans, materials, and/or policy memoranda, training, plan reviews, advisory functions to other agencies, coordination meetings, and joint problem identification.

Searchable Hazard History Tool

The MSP/EMHSD continues to work at collecting and providing relevant and useful information to local jurisdictions regarding their hazards. One such effort had entailed the development of a searchable "hazard history" list that allows incidents to be tracked by county, based on information from the Law Enforcement Information Network (LEIN). This information has been used to assist various local communities in describing previous occurrences of hazardous events within their jurisdictions. It was hoped that this tool could, after additional development and formatting, be able to systematically provide additional detail about local hazard impacts, risks, damages, etc. to supplement the state maps/overviews and National Climatic Data Center sources that have typically been used in local planning efforts since 2000. In some cases, it has been used for this purpose, but doing so requires an extensive dedicated search by EMHSD staff, and therefore is usually only available in cases when that staff is directly assisting with local hazard mitigation planning. Although this tool is still being worked upon, new innovations have been found during the past 3 years that have suggested a change in approach for the information processing that is involved. It does seem likely that a great amount of information is available through alternative sources, such as the NCDC Storm Events Database (online). A greater degree of coordination has developed between the MSP/EMHSD and the USGS, with the result

that a great amount of the flood-related information can probably more efficiently be provided through USGS online tools (as well as those of the National Weather Service) and thus no longer need to be processed from LEIN information sources. As more efficient means of obtaining, collecting, and processing hazard and risk information are discovered or created, MSP/EMHSD intends to make the best use of such efficiencies. This type of flexibility serves the interests of all involved parties. Although the hazard history tool is still theoretically in development, it will likely be used more for technological and human-related hazards, which are not already covered by alternative sources. It therefore provides a complementary information source, since it is still in a cumbersome form, which can be improved upon only with considerable staff time (which has not been available because of higher-priority competing activities in recent years). No single information source is flawless, however, so even for natural hazards that are covered elsewhere, the compiled LEIN information is likely to include additional details. For other types of hazards, the searchable LEIN-based hazard history tool will likely be very useful for hazards such as hazardous materials incidents, plane crashes, and homeland security events.

Direct Planning Assistance

The process and timeframe for reviewing local plans will be a continuation of current procedures. A great number of counties currently have planning grants to update their plans, and, as described earlier, direct assistance by MSP/EMHSD planning staff will be offered to seven communities that need to update their plans but have not been able to receive planning grant funds through HMA. As always, preliminary reviews of draft materials will be provided upon request and full advisory reviews will be provided upon receipt of a submitted plan. Occasional exceptions must be made when staff time is already committed to higher-priority activities, such as active disasters, updating the state hazard mitigation plan, or grant-related deadlines. In these cases, FEMA staff have been requested to review such plans directly. Plans that are judged as needing enhancement in order to meet federal planning requirements will result in the provision of guidance and advice to local jurisdictions and/or their consultants. In some cases, with the approval of involved stakeholders, MSP/EMHSD staff will provide suggested language, procedures, methods, guidance, editing and proofreading assistance to support the successful completion of local plans. When such plans are completed, they are forwarded to FEMA for official review. Completed FEMA reviews are promptly relayed to appropriate local stakeholders upon receipt, along with any advice deemed pertinent to the federal review.

Including these ongoing procedures, the following approximate timeframe for additional anticipated planning activities is as follows:

- March 2014 – Official adoption of the 2014 Michigan Hazard Mitigation Plan update.
- 2014 to 2017 – Ongoing assistance with local mitigation planning, plan review activities, and planning grant administration, to promote the successful completion of as many local hazard mitigation plans as possible (including all those that had received funding support), and with special emphasis upon providing direct assistance to the seven Michigan counties that have not yet completed any FEMA-approved local hazard mitigation plan.
- 2014 to 2017 – Continued direct and indirect assistance to, and administration of available planning grant funds for, local communities that need to update their approved hazard mitigation plans.
- 2014 to 2017 – Continued expansion of the LEIN-based hazard history, and the investigation and development of other resources such as those provided by USGS, National Weather Service, and other agencies, to assist with local and state hazard mitigation planning and plan update processes—especially where such other sources may prove to be less labor-intensive than the EMHSD compilation of LEIN information.
- 2013 to 2015 – MSP/EMHSD planning staff provide direct assistance to selected local communities in order to directly assist with local hazard mitigation plan completion and update, following a set of procedures developed during 2013.
- 2014 to 2015 – MSP/EMHSD will update the “Local Hazard Mitigation Planning Handbook” (EMHSD Pub. 207) to include new information and amendments that are informed by the most recent known authoritative sources and the most recent federal planning requirements.

- 2014 to 2017 – MSP/EMHSD planning staff will meet with, provide information to, and offer assistance to all local emergency management coordinators, through the regularly scheduled MSP district coordinator meetings. At these meetings, staff will present relevant information, guidance, and resources for use in local plan development and update processes.
- 2014 to 2017 – Continuing coordination with state agencies through the MCCERCC, the state agency emergency management coordinators meetings, and other staff contacts.
- 2014 to 2017 – Expanded coordination with the USGS, National Weather Service, regional planning offices, Michigan Climate Coalition, Silver Jackets, Michigan’s many public universities, and agencies such as the Michigan Association of Counties, Michigan Townships Association, and Michigan Municipal League, and the Michigan Association of Planning, to promote and facilitate hazard mitigation planning.
- 2014 to 2017 – Continuing provision of training through regularly-scheduled MSP/EMHSD training courses, direct training provided by MSP/EMHSD planning staff, and outreach and presentations (at conferences, meetings, and university settings).
- 2014 to 2017 – Coordination with, and linking of, local hazard mitigation plans with the Michigan Hazard Mitigation Plan. Coordination proceeds in two directions: (1) assistance and guidance provided to local planning efforts, as described above, and (2) the use of information from local hazard mitigation plans to inform the Michigan Hazard Mitigation Plan, improve its information base, find new ideas for mitigation needs and actions, prioritize project funding, etc., as described previously and in other sections, as well as informing future refinements to the methods for prioritizing communities, accounting for development pressures, etc. As shown in Attachment G (Condensed Review Sheets), a new element was added to the end of Michigan’s local plan review form—this form is used by EMHSD staff to provide feedback on how well local plans or draft material complies with federal regulations, and although there is no requirement that local plans must consider aspects of the state plan, an optional item has been included in the review form so that the possibility of such consideration and coordination may be proposed and considered by local plan developers.

Michigan Hazard Mitigation Plan: Plan Monitoring and Update Activities

Plan Maintenance and Mitigation Monitoring

Plan Maintenance

The MSP/EMHSD and MCCERCC are jointly responsible for the continuous maintenance and revision of this plan, although the MCCERCC's role is strictly advisory in nature. The MCCERCC continually examines planning-related issues at its meetings (full council meetings and committee meetings) and makes recommendations to MSP/EMHSD staff to conduct research as necessary and make appropriate revisions to the plan based on the Council's suggestions. Within the MCCERCC, plan maintenance responsibilities rest primarily with the Hazard Mitigation Committee. The MCCERCC Hazard Mitigation Committee and MSP/EMHSD mitigation staff will meet periodically to review and evaluate parts of the plan. (MSP/EMHSD and other agencies that are referenced, either directly or indirectly, in the list of MHMP Objectives will monitor progress in achieving or reassessing those objectives—see the following section on Hazard Mitigation Monitoring activities.) If deemed necessary and appropriate by the Hazard Mitigation Committee, representatives from local government, involved state and federal agencies, and nongovernmental organizations that participated in the plan development and/or that are impacted by the plan may be invited to participate in this review process. The Hazard Mitigation Committee will analyze the overall success and progress in implementing the plan, as well as the appropriateness of the plan content. Criteria that will be used to evaluate the plan include but are not necessarily limited to:

- The relevance and appropriateness of the plan goals and objectives in relation to current conditions;
- The nature, scope and magnitude of hazard-related problems in the state and country;
- The type and amount of resources available to implement the plan;
- The current and projected capabilities of the assigned implementing agencies;
- Relevant deadlines, priorities, and other consideration of the scarcity of available resources;
- Plan implementation problems that have occurred or that may occur, such as technical, political, legal, social, or coordination issues; and
- The overall success of actions that have been implemented.

In order to more evenly distribute heavy work burdens throughout the available timeframe for this 900 page plan, the hazard analysis section had, in 2012, been separately updated and published with the coordination of multiple agencies and their subject matter experts. A similar procedure is planned for 2015, so that later coordination may focus upon the other sections of the Michigan Hazard Mitigation Plan. As part of the review process, the Hazard Mitigation Committee will review the implementation methods for each objective with the party responsible for implementation to determine which methods worked (will work) well. In addition, the Committee will examine any difficulties encountered, assess how well coordination efforts are proceeding, and determine which methods need to be revised or strengthened. The Hazard Mitigation Committee will compile its findings and create a list of recommended changes that need to be made to the plan content or implementation. Detailed information about hazards and events tend to be compiled continually by MCCERCC agencies. New partnerships, information sources, and analytic methods will continue to be used, maintained, and improved.

The State Planner, lead Hazard Mitigation Planner, and other staff within the State Support Unit of the MSP/EMHSD will use these recommendations to make the necessary changes to the plan. The MSP/EMHSD State Support Unit staff and members of the MCCERCC Hazard Mitigation Committee will present the revised plan to the MCCERCC for its review, approval and adoption. The revised plan will then be submitted to the 1) State Director of Emergency Management and Homeland Security, 2) Deputy State Director of Emergency Management and Homeland Security, and 3) Governor for review, approval, and official adoption and promulgation by the State of Michigan. The newly revised and adopted plan will be submitted to FEMA for approval under the federal Disaster Mitigation Act of 2000 plan revision process—currently on a three-year cycle. Once approved by FEMA, the drafted sections of the plan will (subject to sensitivity considerations) be replaced by final versions on the MSP/EMHSD web site. The finalized 2011 plan had been available for public review and comment for the entire three years until its update process was completed, and it will be replaced with the finalized 2014 edition, when that is approved. Hardcopy editions of the plan may be produced at the discretion of the MSP/EMHSD and MCCERCC.

Post-Incident Plan Review

As appropriate, the plan will be reviewed after Michigan receives a major disaster or emergency declaration under the federal Stafford Act. One such state/federal disaster had taken place since the 2011 edition of this plan had been completed (disaster #4121), and the strategy developed for this disaster has been included in Attachment F. The MSP/EMHSD and MCCERCC will jointly determine if additional review is required, and the extent of the review, based on the situational circumstances at the time of the declaration. (Similar consideration is given to the Michigan Emergency Management Plan, which serves as the response plan for the state.) The incident-specific hazard mitigation strategy document developed jointly with FEMA may in this way become incorporated into appropriate elements of the plan structure. Changes to the plan goals or objectives, or the prioritization of and/or implementation methods for the objectives, will be made if there is a compelling need to make such changes in order to expedite implementation of needed incident-specific hazard mitigation measures. Objectives for the 2014 update have been changed, in part from a consideration (or reprioritization) of activities and events that have occurred within Michigan during the past three years. Any routine or non-urgent changes noted during the post-incident plan review are to be made during the next scheduled plan revision cycle, due to the considerable amount of time and work that it takes to revise the MHMP.

For non-federally declared incidents involving natural, technological or human-caused hazards which cause a need for SEOC activation and/or significant state department involvement, the MSP/EMHSD will, at its discretion based on incident circumstances, review the plan for possible mitigation opportunities during the incident recovery period. In those instances, the MCCERCC may be consulted for its advice, expertise and resources as determined necessary and appropriate by the MSP/EMHSD. Mitigation opportunities will be pursued, at the discretion of the MSP/EMHSD and/or another state, local or federal department/agency with regulatory or stewardship authority over the hazard, if deemed appropriate and potentially effective for mitigating future such incidents and/or their associated negative impacts and consequences. Such mitigation actions may be reported on in the Incident Action Plan (IAP), Incident After-Action Report (if one is developed) and/or in standard Incident Status Reports. In some cases (at the discretion of the MSP/EMHSD and/or other regulatory/steward department or agency), a mitigation-specific report or strategy document may be developed to outline the problems encountered, the need for mitigation actions, and the specific actions taken and by whom. If such a report is developed, it may (at the discretion of the MSP/EMHSD) be appended to this plan for monitoring, implementation and historical record purposes. Again, routine or non-urgent matters are best handled through MHMP amendments that occur during the ordinary three-year update cycle, since this provides the greatest opportunity for coordination and feedback involving many agencies as well as the general public.

At a minimum, the post-incident review for possible mitigation opportunities could be recorded in the following table, to provide an historical record for the reviews that occurred:

Post-Incident Hazard Mitigation Plan Reviews, by Incident

Incident Date	Incident Type	Brief Description of Incident	Review Conducted By (Agency)	Specific Mitigation Actions Implemented	Implementing Agency

Hazard Mitigation Plan Monitoring

The responsibility for monitoring and tracking the progress of mitigation actions and project closeouts rests primarily with the MSP/EMHSD staff for activities that involve HMA funding, while other Objectives involve the activities of agencies such as the MDNR and MDEQ, who would thus handle the monitoring for these activities and report either through direct contact with MSP and other relevant agencies, or through their MCCERCC representatives. The MSP/EMHSD mitigation staff has always carried significant project monitoring and tracking responsibilities as the grant managers for the Hazard Mitigation Assistance (HMA) program (including HMGP, FMAP, and PDMP), which are often used to fund projects or actions listed in this plan (or which this plan supports for implementation by local communities in conjunction with their own plans).

MCCERCC's Michigan Community Emergency Response and Citizen Corps Coordination Plan

A significant component of the MCCERCC monitoring process involves the update of the mitigation elements in its own "Michigan Community Emergency Response and Citizen Corps Coordination Plan." This report is updated annually and serves as the "official" record of the MCCERCC-related mitigation achievements for each year. The MCCERCC's Michigan Community Emergency Response and Citizen Corps Coordination Plan and its updates are made available to the Governor and state agencies, the Michigan Legislature, and the state's local emergency management / homeland security programs. They have also been made available on the associated MSP/EMHSD and MCCERCC web site for viewing and downloading by the general public and other interested parties, at http://www.michigan.gov/msp/0,4643,7-123-60152_62790-198426--,00.html. Once projects or objectives are completed and closed out, they will be removed from the "active" objectives table of the MHMP by the MSP/EMHSD and reported on, as appropriate, in the MCCERCC's Michigan Community Emergency Response and Citizen Corps Coordination Plan—most likely in the form of a mitigation "success story." The project or objective will also be listed in the "Compendium of Addressed Objectives" table in the MHMP and the "active" objectives table will be updated accordingly. Many projects, however, are ongoing rather than fully completed, and in these cases, the MHMP reports the current status (in this case, any progress achieved since the previous plan update in 2011).

As indicated above in the "Plan Maintenance" section, the MCCERCC Hazard Mitigation Committee and MSP/EMHSD mitigation staff do meet regularly to review various sections of the plan (and its hazard analysis) during the three years between update deadlines for the MHMP's FEMA-mandated cycle. Part of that review and evaluation process includes a thorough review of the plan goals, objectives, and specific implementation strategies. The MSP/EMHSD charts progress on each objective, reports this to the MCCERCC Hazard Mitigation Committee in the MCCERCC Annual Report of Activities and during explicit MHMP update activities, and the results are summarized in the MHMP Objectives descriptions. This allow for regular review of progress and an easier update method that fits into the required three-year plan revision cycle. The MSP/EMHSD State Hazard Mitigation Officer (SHMO) will be primarily responsible for continuously tracking and monitoring the progress of implementation of the various projects and actions listed under each plan objective. As part of the annual report development, the SHMO will follow up with the involved parties throughout the year to determine the implementation progress and status. As appropriate, the SHMO will request periodic reports (verbal and/or written) on project status, conduct site visits, monitor media reports, hold conference calls or meetings, or use other methods as necessary to obtain status information.

Project Tracking, Monitoring, and Closeout

Mitigation projects listed in the MHMP that are being funded under the HMA (HMGP, FMAP, PDMP) are tracked, monitored and closed out by MSP/EMHSD mitigation staff in accordance with applicable federal and state laws and guidelines and the provisions set forth in the FEMA-approved State Administrative Plan and/or program guidance documents for each funding program. The status of each of these projects will be reported on periodically by the SHMO at MCCERCC Hazard Mitigation Committee meetings. Progress is also reported on quarterly reports to FEMA as per federal program requirements. All projects are closed out in accordance with the requirements set forth at the time of close out by FEMA. In general, the closeout process for grant projects under these programs involves reconciling the financial documentation, processing the final payment, conducting a site visit, photographing the project site, geo-locating the project, completing all required closeout paperwork (including environmental documentation), and submitting a closeout request package to FEMA. These activities are the responsibility of the SHMO and are sometimes carried out with the assistance of the Assistant SHMO or a FEMA Disaster Assistance Employee (DAE).

Monitoring Acquired Land

Another component of the grant program project closeouts involves the long-term monitoring of acquired lands. For newer project grants, the State is required to provide a report to the FEMA Regional Administrator every three years certifying that acquired lands continue to be maintained consistent open-space grant provisions. Michigan intends to report for all mitigation grant acquired lands rather than just for the newer projects, when requested to report by FEMA. To achieve this obligation, the assistance of MSP/EMHSD Regional Support Field staff will be employed. For emergency management and homeland security purposes, Michigan is divided into eight (8) districts with a MSP/EMHSD District Coordinator assigned to each. The District Coordinators work closely with the communities and local emergency management programs within their respective districts and therefore travel through their districts on a regular basis. Every three years, the SHMO will provide each District Coordinator with a list of properties, from the MSP/EMHSD GIS data base, that have been acquired with mitigation grants. Each District Coordinator will be

asked to visit the properties that are located in their district to confirm that the properties are being maintained appropriately. The District Coordinators will then report back to the SHMO who will compile an annual report of acquired property status. At MSP/EMHSD discretion, this report will be included in the MCCERCC's Michigan Community Emergency Response and Citizen Corps Coordination Plan. The report will be provided to the FEMA Regional Administrator upon his/her request every three years.

The MSP/EMHSD maintains a comprehensive data base of all HMA (HMGP, FMAP, PDMP) projects funded in Michigan, which it uses to track and monitor the projects and which also serves as a historical record of all projects funded under each program. A summary of those data bases (in table format) can be found in Attachment C in this plan.

Implementation Status of Hazard Mitigation Objectives: 2011-2014

Some of the mitigation objectives under each goal from the March 2011 edition of this plan have been implemented, some have not, and many are still in process. (Information related to implementation status for each objective is generally contained in the "Comments" column of each goal table in the "Mitigation Opportunities, Recommendations, and Implementation" section. In addition, the tables titled "Compendium of Addressed Objectives" contain a complete listing of those objectives that have either been completed or removed from further consideration due to non-feasibility, consolidation, or other reason.) The State of Michigan will continue to work towards successful implementation of the updated objectives during the next three-year revision cycle for this plan as time, resources, priorities, and circumstances permit.

A number of factors influenced the implementation of state-level mitigation objectives in Michigan during the period from 2011-2014, following upon a series of negatively impacting factors from the previous three-year period that limited or hindered full implementation of all scheduled objectives. The identified factors include:

- Lack of available state and local funds for project cost-sharing and general project implementation due to extreme state and local budget shortfalls. (Note: Nationally, in recent years, Michigan has either been dead-last or near the bottom in many state-level economic vitality indicators, and was also the only state to lose population between the 2000 and 2010 censuses.)
- Competing projects within the MSP/EMHSD and other agencies which addresses hazard mitigation activities, whether from disasters or other required emergency management activities, staff departures and reassignments, cross-training needs to prepare for the possibility of such departures or reassignments, etc.
- A huge decrease in homeland security funding for MSP/EMHSD and other agencies, causing additional work to find compensating or substitute sources of funding, or to calculate cheaper and more efficient means of accomplishing planned tasks with reduced funds and staff. In addition, an ever-increasing complexity of program requirements and correspondingly shorter timeframes for successful development and completion of activities under the various grants or mandates (e.g. THIRA) have created tremendous challenges.
- The general complexity and time-consuming nature of the DMA 2000 state mitigation planning requirements themselves, which siphon away scarce staff resources from efforts to implement the plan objectives.
- The statewide local hazard mitigation planning effort, which is in many ways a more natural level of government to be able to address hazards and implement specific projects in the field (or through land use regulatory functions, which are primarily held by local levels of government). Proposed legislation, to better coordinate state and local planning by increasing the state's plan update cycle from 3 years to 5 years, is supported by EMHSD staff, who recommend that this change be made as soon as possible.

Please refer to the "Mitigation Opportunities, Recommendations, and Implementation" section for a comprehensive discussion of the plan's goals, objectives, recent implementation status, and implementation methods. The various lists and tables provide background information on each objective, its priority and target timeframe for implementation, funding sources that might be used in implementation, and general comments regarding the status of implementation and possible implementation impediments.

Applicant Assurances

The State of Michigan will comply with all applicable Federal statutes and regulations during the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c) and will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d).

At the time of application for FEMA mitigation grant funds, applicants sign FEMA Form 20-16 certifying that they will comply with applicable standard assurances as follows: (FEMA Form 20-16A) Assurances for Non-Construction Programs, (FEMA Form 20-16B) Assurances for Construction Programs, (FEMA Form 20-16C) Certifications Regarding Lobbying; Debarment, Suspension, and other Responsibility Matters; and Drug-Free Workplace Requirements, and (FEMA SF-LLL) Disclosure of Lobbying Activities. **At the time of grant award** for FEMA mitigation grant funds, recipients sign a grant agreement officially certifying that they will administer the grant in accordance with Federal regulations including (but not limited to) Titles 2, 31, and 44 of the Code of Federal Regulations, OMB Circulars, and applicable State laws and statutes.